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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,585

04/10/2007

Glen Ernst

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1463

22466

7590

01/29/2009

ASTRA ZENECA PHARMACEUTICALS LP  
GLOBAL INTELLECTUAL PROPERTY  
1800 CONCORD PIKE  
WILMINGTON, DE 19850-5437

EXAMINER

WILLIS, DOUGLAS M

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

01/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,585	<b>Applicant(s)</b> ERNST ET AL.	
	<b>Examiner</b> DOUGLAS M. WILLIS	<b>Art Unit</b> 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 and 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11-20-06; 10-09-08</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |



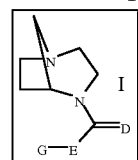
## DETAILED ACTION

### *Status of the Claims / Priority*

Claims 1-17 are pending in the current application. According to the *Listing of Claims*, filed December 22, 2008, claims 1-4 were amended. This application is a 35 U.S.C. § 371 National Stage Filing of International Application No. PCT/SE2004/001942, filed December 20, 2004, which claims priority under 35 U.S.C. § 119(e) to US Provisional Application No. 60/531,644, filed December 22, 2003.

### *Status of Restrictions / Election of Species*

The statement that the elected species was found to be free of the prior art, made in the *Non-Final Rejection*, mailed on October 16, 2008, is recanted in light of the new ground of rejection presented herein below.



Applicant's affirmation of the following election, without traverse, in the reply filed on December 22, 2008, is acknowledged: a) Group I - claims 1-4 and 10, where D = -O-; E = -C(R<sup>1</sup>)<sub>2</sub>-C(R<sup>1</sup>)<sub>2</sub>-, -CR<sup>1</sup>=CR<sup>1</sup>- or -C≡C-; and G = -Ph; and b) substituted diazabicyclo[3.2.1]oct-4-ylpropenone of formula I - p. 12, example 2.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 5-9 and 11-17, drawn to a nonelected invention, without traverse, in the reply filed on December 22, 2008. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144). See MPEP § 821.01.

Thus, a second Office action and prosecution on the merits of claims 1-4 and 10 is

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contained within.

*Status of Information Disclosure Statement*

Applicant entered no arguments in the *Remarks*, filed December 22, 2008, with respect to the information disclosure statement, filed October 9, 2008. Consequently, the objection to the information disclosure statement, made in the *Non-Final Rejection*, mailed on October 16, 2008, is sustained for the reasons of record.

*Status of Claim Rejections - 35 U.S.C. § 112, First Paragraph*

Applicant's arguments, on page 8 of the *Remarks*, filed December 22, 2008, with respect to claims 1-4 and 10 have been fully considered and are persuasive. Consequently, the rejection of claims 1-4 and 10, made in the *Non-Final Rejection*, mailed on October 16, 2008, is hereby withdrawn, since, according to the *Listing of Claims*, filed December 22, 2008, claims 1-4 and 10 have been amended to overcome the rejection, with regard to *prodrugs* of substituted diazabicyclo[3.2.1]oct-4-ylpropanones of the formula I.

Applicant's arguments, on pages 7-8 of the *Remarks*, filed December 22, 2008, with respect to claims 1 and 10 have been fully considered, but are not persuasive. Consequently, the rejection of claims 1 and 10, made in the *Non-Final Rejection*, mailed on October 16, 2008, is maintained for the reasons of record.

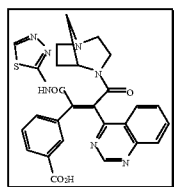
Applicant primarily argues that the Office has provided no reason to question the specification's disclosure with respect to compounds within the scope of the claim, rather than the much broader discussion offered in the rejection.

In response to applicant's argument that the Office has provided no reason to question the

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specification's disclosure with respect to compounds within the scope of the claim, the examiner respectfully disagrees.

Currently, applicant's elected invention is directed to Group I, where D = -O-; E = -C(R<sup>1</sup>)<sub>2</sub>-C(R<sup>1</sup>)<sub>2</sub>-, -CR<sup>1</sup>=CR<sup>1</sup>- or -C≡C-; and G = -Ph. Based on the guidance provided by the specification and, absent any evidence to the contrary, it is presently unclear whether a substituted diazabicyclo[3.2.1]oct-4-ylpropenone or pharmaceutical composition of the formula



I, such as (Z)-3-(1-(1,3,4-thiadiazol-2-ylamino)-4-(1,4-diazabicyclo[3.2.1]octan-4-yl)-1,4-dioxo-3-(quinazolin-4-yl)but-2-en-2-yl)benzoic acid, shown to the left, is either synthetically feasible or possesses utility as a nicotinic acetylcholine receptor ligand.

The examiner requires that applicant: a) discretely indicate where the specification enables one of ordinary skill in the art to make the substituted diazabicyclo[3.2.1]oct-4-ylpropenone, shown above, or a pharmaceutically acceptable composition thereof; and b) discretely identify enabling disclosure that will allow one of ordinary skill in the art to use the substituted diazabicyclo[3.2.1]oct-4-ylpropenone, shown above, or a pharmaceutically acceptable composition thereof, as a nicotinic acetylcholine receptor ligand, to overcome this rejection.

Applicant should note that the enablement requirement refers to the requirement of 35 U.S.C. § 112, first paragraph that the specification describe how to make and how to use the invention. The invention that one skilled in the art must be enabled to make and use is that defined by the claims of the particular application or patent.

The purpose of the requirement that the specification describe the invention in such terms

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that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way. The information contained in the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention. A patent claim is invalid if it is not supported by an enabling disclosure.

Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. {See *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)}. Accordingly, even though the statute does not use the term *undue experimentation*, it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. (See *In re Wands*, 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988); and see also *United States v. Teletronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988)}.

*Status of Claim Rejections - 35 U.S.C. § 103*

Applicant's arguments, on pages 8-9 of the *Remarks*, filed December 22, 2008, with respect to claims 1, 2 and 10 have been fully considered, but are moot in light of the new ground of rejection presented herein below.

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### *New Specification Objection*

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art (including information disclosed under 37 CFR 1.97 and 1.98).
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825).

Applicant is advised to format the specification according to 37 CFR 1.77(b) above. Revisions should particularly include and/or address sections (c-i). Appropriate correction is required.



*Specification - Title*

Applicant is reminded of the proper content of the title of the invention.

The title of the invention should be brief, but technically accurate and descriptive, preferably from two to seven words. See 37 CFR 1.72(a) and MPEP § 606.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. In the revised title, the examiner suggests including the identity of the compounds which applicant regards as their invention.

*New Specification Objection - Abstract*

Applicant is reminded of the proper content of an abstract of the disclosure.

With regard particularly to chemical patents, for compounds or compositions, the general nature of the compound or composition should be given as well as the use thereof, e.g., *The compounds are of the class of alkyl benzene sulfonyl ureas, useful as oral anti-diabetics.* Exemplification of a species could be illustrative of members of the class. For processes, the reactions, reagents and process conditions should be stated, generally illustrated by a single example, unless variations are necessary. See MPEP § 608.01(b), Section B.

The abstract of the disclosure is objected to for the following reason: it should be amended to reflect the scope of the *Requirement for Restriction / Election of Species*, as discussed herein above and in the *Non-Final Rejection*, mailed on October 16, 2008. Correction is required. See MPEP § 608.01(b).

*New Claim Objections*

Claims 1-3 and 10 are objected to because of the following informalities: according to the

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*Listing of Claims*, filed December 22, 2008, the claims do not comply with the *Requirement for Restriction / Election of Species*, as discussed herein above and in the *Non-Final Rejection*, mailed on October 16, 2008. Appropriate correction is required.

Claim 3 is objected to because of the following informalities: there is a syntax error in line 6. Appropriate correction is required.

Claim 4 is objected to because of the following informalities: the phrase *or a* should be deleted in line 5 and replaced with the term *and*. Appropriate correction is required.

*Claim Rejections - 35 U.S.C. § 112, Second Paragraph*

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad limitation together with a narrow limitation that falls within the broad limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), pertaining to where broad language is followed by *such as* and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of

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the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation *stereoisomers* in the next to last line, and the claim also recites *enantiomers* in the next to last line, which is the narrower statement of the limitation.

### *Claim Rejections - 35 U.S.C. § 103*

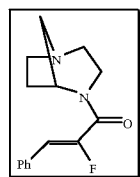
The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. § 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

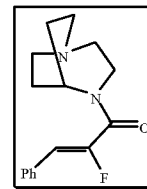
Claims 1-4 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ernst, et al. in WO 04/016616.



The instant application recites substituted diazabicyclo[3.2.1]oct-4-ylpropanones and pharmaceutical compositions of the formula I, shown to the left, where D = -O-; E = -CR<sup>1</sup>=CR<sup>1</sup>-, wherein R<sup>1</sup> = -F and R<sup>1</sup> = -H; and G = -Ph, as nicotinic acetylcholine receptor ligands.

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Ernst, et al. (WO 04/016616), as provided in the file and recited on the IDS, teaches substituted diazabicyclo[3.2.2]nonan-4-ylpropenones and pharmaceutical compositions of the formula I, shown to the right, where D = -O-; E = -CR<sup>1</sup>=CR<sup>1</sup>-, wherein R<sup>1</sup> = -F and R<sup>1</sup> = -H; and G = -Ph, as nicotinic acetylcholine receptor ligands [p. 14, example 12; and pharmaceutical compositions - p. 16, line 11 - p. 17, line 7]. Furthermore, in the genus disclosure, Ernst teaches that a, b or c, with regard to the substituted diazabicyclo[3.2.2]nonan-4-ylpropenones and pharmaceutical compositions of the formula I, may each be 1 or 2 [p. 1, line 20].



The only difference between the applicant's instantly recited substituted diazabicyclo[3.2.1]oct-4-ylpropenones and pharmaceutical compositions of the formula I and Ernst's substituted diazabicyclo[3.2.2]nonan-4-ylpropenones and pharmaceutical compositions of the formula I is the instantly recited substituted diazabicyclo[3.2.1]oct-4-ylpropenones and pharmaceutical compositions of the formula I and Ernst's substituted diazabicyclo[3.2.2]nonan-4-ylpropenones and pharmaceutical compositions of the formula I are homologs.

The MPEP § 2144.09 states that *compounds which are homologs, differing regularly by the successive addition of the same chemical group, e.g., by -CH<sub>2</sub>- groups, are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties.* {See *In re Wilder*, 563 F.2d 457, 195 USPQ 426 (CCPA 1977)}.

Similarly, the courts have recognized that *even in the case of homologs, a rejection on the basis of structural relation may be improper, with the critical question to be answered being whether the moieties of the molecules under consideration are considered 'homologous' under some available definition or whether they are sufficiently similar from the standpoint of*

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*structural similarity, so that those now claimed would be suggested to chemists from those disclosed and would be expected to have like properties. (See Ex parte Burtner and Brown, 121 USPA 345 (1951).*

Moreover, the courts have recognized that *when expectation of similar properties stands unrebutted, it necessarily follows that expectation of similar uses also stands unrebutted, [with] expectation of similar use necessarily implying expectation of substantially equivalent substitute(s). Furthermore, there is no logical basis for distinguishing patentably between a prior art [homologous] compound and a claimed novel compound prima facie obvious therefrom, even where a previously unknown or unobvious use has been found, where that use nevertheless inheres in both compounds and it is the compound per se that is claimed. {See In re Hoch, 57 CCPA 1292, 428 F.2d 1341, 166 USPQ 406 (1970)}.*

Consequently, since: a) Ernst teaches substituted diazabicyclo[3.2.2]nonan-4-yl-propenones and pharmaceutical compositions of the formula I, which are homologous with the substituted diazabicyclo[3.2.1]oct-4-ylpropenones and pharmaceutical compositions of the formula I; b) Ernst teaches substituted diazabicyclo[3.2.2]nonan-4-yl-propenones and substituted diazabicyclo[3.2.1]oct-4-ylpropenones as alternatively usable; c) the MPEP § 2144.09 states that *compounds which are homologs are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties*; and d) the courts have recognized that *an unrebutted expectation of similar use may imply expectation of substantially equivalent substitutes (i.e. homologous compounds)*, one having ordinary skill in the art, at the time this invention was made, would have been motivated to utilize the teachings of Ernst and form both homologous and alternatively usable substituted diazabicyclo[3.2.1]oct-4-

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ylpropenones and pharmaceutical compositions of Ernst's substituted diazabicyclo[3.2.2]nonan-4-yl-propenones and pharmaceutical compositions of the formula I, with a reasonable expectation of success and similar therapeutic activity, rendering claims 1-4 and 10 obvious.

Finally, although not explicitly discussed herein, applicant is advised to note that the Ernst reference is replete with homologous species of the instantly recited substituted diazabicyclo[3.2.1]oct-4-ylpropenones of the formula I. Consequently, any amendments to the claims or arguments formulated to overcome rejections rendered under 35 U.S.C. § 103(a) should address this reference as a whole and should not be limited to the species discussed or disclosed explicitly herein.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made, absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

*New Claim Rejections - Obviousness-type Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute), so as to prevent the unjustified or improper timewise extension of the *right to exclude* granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application

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claim is not patentably distinct from the reference claims because the examined application claim is either anticipated by, or would have been obvious over, the reference claims. {See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969)}.

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 10 are provisionally rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 5, 7 and 14 of copending Application No. 10/524,482. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 14 in the copending application recite identical definitions and limitations for  $Ar$ ,  $R^1$  and  $R^2$ , which provides homologous subject matter with respect to the substituted diazabicyclo[3.2.1]oct-4-ylpropenones and pharmaceutical compositions of the formula I in the instant claims.

The MPEP § 2144.09 states that *compounds which are homologs, differing regularly by*

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*the successive addition of the same chemical group, e.g., by -CH<sub>2</sub>- groups, are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. {See In re Wilder, 563 F.2d 457, 195 USPQ 426 (CCPA 1977)}.*

Similarly, the courts have recognized that *even in the case of homologs, a rejection on the basis of structural relation may be improper, with the critical question to be answered being whether the moieties of the molecules under consideration are considered 'homologous' under some available definition or whether they are sufficiently similar from the standpoint of structural similarity, so that those now claimed would be suggested to chemists from those disclosed and would be expected to have like properties. (See Ex parte Burtner and Brown, 121 USPA 345 (1951).*

Moreover, the courts have recognized that *when expectation of similar properties stands unrebutted, it necessarily follows that expectation of similar uses also stands unrebutted, [with] expectation of similar use necessarily implying expectation of substantially equivalent substitute(s). Furthermore, there is no logical basis for distinguishing patentably between a prior art [homologous] compound and a claimed novel compound prima facie obvious therefrom, even where a previously unknown or unobvious use has been found, where that use nevertheless inheres in both compounds and it is the compound per se that is claimed. {See In re Hoch, 57 CCPA 1292, 428 F.2d 1341, 166 USPQ 406 (1970)}.*

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

*Allowable Subject Matter*

No claims are allowed.



*Conclusion*

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS M. WILLIS, whose telephone number is 571-270-5757. The examiner can normally be reached on Monday thru Thursday from 8:00-6:00 EST. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson, can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOUGLAS M WILLIS/  
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